(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property **Organization** International Bureau





(43) International Publication Date 14 October 2004 (14.10.2004)

PCT

(10) International Publication Number WO 2004/088676 A1

(51) International Patent Classification7: H01B 7/295, 3/12

(21) International Application Number:

PCT/AU2004/000410

(22) International Filing Date: 31 March 2004 (31.03.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2003901872 31 March 2003 (31.03.2003) AU 2003905779 21 October 2003 (21.10.2003)

(71) Applicant (for all designated States except US): POLY-MERS AUSTRALIA PTY LTD [AU/AU]; 32 Business Park Drive, Notting Hill, Victoria 3168 (AU).

(72) Inventors; and

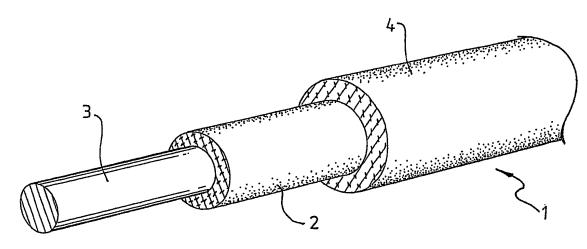
(75) Inventors/Applicants (for US only): ALEXANDER, Graeme [AU/AU]; 2/1 Daff Avenue, Hampton East, Victoria 3188 (AU). CHENG, Yi-Bing [AU/AU]; 639 Highbury Road, East Burwood, Victoria 3151 (AU). BURFORD, Robert, Paul [AU/AU]; 107 Prospect Road, Summer Hill, New South Wales 2130 (AU). MANSOURI, Jaleh [AU/AU]; 437/83-93 Dalmeny Avenue, Rosebery, New South Wales 2018 (AU). WOOD, Christopher

[AU/AU]; 46a Barkley Street, Ringwood, Victoria 3134 (AU). BARBER, Kenneth Willis [AU/AU]; "Istana Park", Cherry Swamp Road, Little River, Victoria 3211 (AU). RODRIGO, Pulahinge Don Dayananda [AU/AU]; 9 Murillo Court, Doncaster, Victoria 3108 (AU). IVANOV, Ivan [AU/AU]; 10/2 Wingate Avenue, Ascot Vale, Victoria 3032 (AU).

- (74) Agent: FREEHILLS CARTER SMITH BEADLE; Level 43, 101 Collins Street, Melbourne, Victoria 3000
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,

[Continued on next page]

(54) Title: CABLE AND ARTICLE DESIGN FOR FIRE PERFORMANCE



(57) Abstract: A cable (1) comprises a conductor (3), an insulating layer (2) which forms a self-supporting ceramic layer when exposed to elevated temperatures experienced in a fire, and an additional heat transformable layer (4). The additional layer (4) can be another layer which forms a self-supporting ceramic layer when exposed to fire, or it can act as a sacrificial layer which decomposes at or below the temperature that the insulating layer forms a ceramic. The addition layer can enhance the strength of the layers before during or after the fire, the structural integrity of the insulating layer after the fire, the resistance of the layers to the ingress of water after the fire, or the electrical or thermal resistance of the layers during and after the fire.

WO 2004/088676 A1



GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

with international search report